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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,275	03/25/2005	Hans-Juergen Oberle	081276-1063-00	2135

23409 7590 04/10/2006

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EXAMINER	
PILKINGTON, JAMES	
ART UNIT	**PAPER NUMBER**
3682	

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/529,275	OBERLE ET AL.	
	Examiner	Art Unit	
	James Pilkington	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *25 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 March 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5/25/2005
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "stopping faces and/or the component features a profiled surface" in the form of teeth or steps must be shown or the feature(s) canceled from the claim(s) (see clms 2 and 3). In all the figures only one stopping face is shown with a profiled surface forming teeth or steps. No new matter should be entered.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "44" has been used to designate both "the component" and "the elastic ring element". Figure 11 shows the wedge shaped component which is labeled as "44" on the left hand side of the figure. On the right hand side "44" is used to point to "the elastic ring element." Clm 7 states that the component is an elastic ring element but from the figure it is unclear how this is possible if both the wedge shaped element and the ring are labeled "44" (see ¶ 6).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

- Each figure must have its own brief description. Therefore figures 5a, 5b, 6a, 6b, 9a, 9b, 10a, 10b and 10c must have their own descriptions.

Appropriate correction is required.

Claim Objections

4. Clms 1-20 are objected to because of the following informalities:

- Re all clms, the use of the word "characterized" is not acceptable U.S. terminology.
- Clm 5 reads "the one stopping face" examiner believes it is meant to read - -the stopping faces- -
- Clm 15 reads "stair-step-like profile" and is dependent from clm 2 which reads "saw-tooth-like profile." It is unclear as to what profile is being used.
- Clm 16 reads "annular stair steps" and is dependent from clm 2 which reads "saw-tooth-like." Are annular steps being used or saw-tooth-like?

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 2, 3 and 15-19 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for one of the stopping faces or the component to feature a profiled tooth surface (pg 2 line 26), it does not reasonably provide enablement for both having profiled tooth surfaces. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

7. Claim 7 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is unclear to the examiner, in both the specification and the claims, as to how the component (as claimed in clm 1) can be embodied as an elastic ring element and still perform the same function as intended in the specification and claim 1. Changing the component of clm 1, which is clearly shown to be a "wedge shaped" member, to an elastic ring eliminates the angle of inclination and the friction, which is used to reduce the axial force. As written, clm 7 appears to be removing this essential friction variance created by component 44 of clm 1 and using a spring element to interact with a stopping face. The examiner does not see how a friction force (resistive) can be replaced with a spring force (restoring) and the system function the same.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-20 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re clms 1, 2, 4, 5, 6, 10, and 16-20, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

Re clms 2, 3 and 15, the phrase "saw-tooth-like" or "stair-step-like" renders the claim indefinite because it is unclear as to how much like saw tooth or stair steps the element needs to be to meet the limitations.

Clm 11 reads "pre-stressed elastic element." It is unclear as to how or what is causing the elastic element to be pre-stressed.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 5, 6, and 8-13, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Giandinoto et al, USP 3,848,477.

Re clm 1, Giandinoto discloses a gear drive unit (Fig 1) with a(n):

- Gear housing (R4/R5)

- Shaft (10)
- Axial stopping face (24)
- Counter stopping face (30)
- Plane (@ character 24)
- Angle of inclination (see Figure 1 below)
- Component (26)
- Characterized in that the coefficient of friction between the at least one stopping face (24,30) and the component (26) for a movement to reduce the axial force is greater than the tangent of the angle of inclination (C2/L45-65).

Re clm 5, the component (26) is embodied to be one piece with the one stopping faces (24,30).

Re clm 6, the component (26) is embodied to be U-shaped (Figs 3 and 4; C2-C3) and surrounds a stopping sleeve (42).

Re clm 8, the component (26) is embodied to be a 2-step wedge (Figs 3 and 4; C2-C3).

Re clm 9, the shaft (10) features a fore part (22) and/or at least one collar (14).

Re clm 10, the shaft (10) features a worm toothing or thread toothing (R1), and engages in an inside thread (on R2).

Re clm 11, the component (26) can be displaced radially to the longitudinal axis by means of a pre-stressed elastic element (36).

Re clm 12, the elastic element (36) is supported on a covering (38) of the gear housing (R4/R5).

Re clm 13, the elastic element (36) is embodied to be one piece with the component (26) (Fig 2). Elastic element (36) is fixed to the component (26) via part 34 making the elastic element (36) and component (26) one part and according to Merriam-Webster's Collegiate Dictionary: 10th Edition the word one is defined as "being single unit or thing."

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 2, 3, 15, 18 and 19, as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Giandinoto et al '477 in view of Gunner et al, EP0563410.

Re clms 2, 3 and 15 (see ¶3), Giandinoto discloses all of the claimed subject matter as described above.

Giandinoto does not disclose at least one of the stopping faces having a saw-tooth-like profile (clm 2) or stair-step-like profile (clm 3 and 15)

Gunner teaches at least one stopping face (41) having a saw-tooth-like or stair-step-like profile (Fig 2) for the purpose of providing better interaction between surfaces and to reduce the wear between the wedge faces.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Giandinoto and provide a stopping face with a stair-step like profile, as taught by Gunner, for the purpose of providing better interaction between surfaces and reduce the wear between the wedge faces.

Re clms 18 and 19, Giandinoto discloses that the component (26) is embodied to be one piece with the one stopping faces (24,30).

14. Claims 4 and 20, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Giandinoto et al '477 in view of Zoino, USP 4,212,379.

Re clm 4, Giandinoto discloses all of the claimed subject matter as described above.

Giandinoto does not disclose at least one of the stopping faces being embodied as cone-shaped and having annular stair steps.

Zoino teaches at least one of the stopping faces (27) being embodied as cone-shaped and having annular stair steps (58) for the purpose of allowing a load (force) to be taken at a gradually increasing rate those preventing sudden shock or strain in the system (C1). It is to be noted that a conical clutch and the stopping system in the instant application both relay on friction as a means of varying an output force.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Giandinoto and provide at least one of the stopping faces being embodied as cone-shaped and having annular stair steps, as taught by Zoino, for the purpose of allowing a load (force) to be taken at a gradually increasing rate those preventing sudden shock or strain in the system.

Re clm 20, Giandinoto discloses that the component (26) is embodied to be one piece with the one stopping faces (24,30).

15. Claims 16 and 17, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Giandinoto et al '477 in view of Gunner et al, EP0563410, and further in view of Zoino, USP 4,212,379.

Giandinoto in view of Gunner discloses all of the claimed subject matter as described above.

Giandinoto in view of Gunner does not disclose at least one of the stopping faces being embodied as cone-shaped and having annular stair steps.

Zoino teaches at least one of the stopping faces (27) being embodied as cone-shaped and having annular stair steps (58) for the purpose of allowing a load (force) to be taken at a gradually increasing rate those preventing sudden shock or strain in the system (C1). It is to be noted that a conical clutch and the stopping system in the instant application both relay on friction as a means of varying an output force.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Giandinoto in view of Gunner and provide at least one of the stopping faces being embodied as cone-shaped and having annular stair steps, as taught by Zoino, for the purpose of allowing a load (force) to be taken at a gradually increasing rate those preventing sudden shock or strain in the system.

18. It is to be noted that requests for translations for the foreign prior art cited by the applicant and used in the above office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JP
04/04/2006

RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER